

WHAT IS CLAIMED IS:

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1. A method for identifying a patient having an increased risk for developing breast precancer or breast cancer, said method comprising:  
providing a ductal fluid sample from one duct of a breast of a patient, said fluid not mixed with ductal fluid from any other duct of the breast; and  
detecting a viral agent in the ductal fluid sample.
  2. A method as in claim 1, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker, in the sample.
  3. A method as in claim 1, wherein the ductal fluid is retrieved by nipple aspiration.
  4. A method as in claim 1, wherein the ductal fluid is retrieved by placing a ductal access tool in the duct and infusing fluid into the duct through the tool and retrieving from the accessed duct through the tool a portion of the infused fluid mixed with ductal fluid.
  5. A method as in claim 3, wherein the method is repeated for more than one duct on a breast.
  6. A method as in claim 3, wherein the method is repeated for a plurality of ducts on a breast.
  7. A method as in claim 1 further comprising analyzing the ductal fluid for abnormal cytology.
  8. A method as in claim 1, wherein a viral agent is detected, further comprising monitoring a variable selected from the group consisting of a viral titer, concentration of a viral agent, and presence of a viral marker by taking repeated periodic ductal fluid samplings.
  9. A method as in claim 8, wherein a viral agent is monitored and the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker by taking repeated periodic ductal fluid samplings.
  10. A method as in claim 8, wherein the periodicity is selected from the group consisting of daily, weekly, biweekly, monthly, bimonthly, every six months, annually, and biannually.
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11. A method as in claim 1, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.

12. A method of treating a patient at risk for or having a breast precancer or breast cancer comprising:

detecting a viral agent in a fluid sample collected from a breast duct; and  
delivering to the patient a composition comprising an antiviral agent specific for the detected viral agent.

13. A method as in claim 12, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker.

14. A method as in claim 12, wherein the antiviral agent is delivered intraductally to a duct in which the viral agent is detected.

15. A method as in claim 12, wherein viral agent is detected in more than one fluid sample collected separately from more than one breast duct

16. A method as in claim 12, wherein viral agent is detected in a fluid sample collected from a plurality of breast ducts.

17. A method as in claim 12, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.

18. A method as in claim 12, wherein the antiviral agent is selected from the group consisting of an anti-HPV viral agent, an anti-EBV viral agent, and an anti-herpes viral agent.

19. A method as in claim 12, wherein the composition comprising said antiviral agent is delivered systemically.

20. A method as in claim 14, wherein the antiviral agent is delivered by placing a ductal access tool in a target duct and infusing a composition comprising the antiviral agent into the duct through the tool.

21. A kit or system for identifying a patient having an increased risk for developing breast precancer or breast cancer, said kit or system comprising a ductal access tool, and reagents and instructions for detecting a viral agent in ductal fluid collected using the tool.

22. A kit or system for treating a patient at risk for or having a breast precancer or breast cancer in which a viral agent is a component and is present in the affected duct, said kit or system comprising a ductal access tool for intraductal delivery of a composition, the composition comprising an antiviral agent, and instructions for use.